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			2178	

DATE MAILED: 11/18/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b>	<b>Applicant(s)</b>	
	09/886,199	PRESS, ROBERT	
	<b>Examiner</b>	<b>Art Unit</b>	
	Cong-Lac Huynh	2178	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 21 June 2001.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-56 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-26,38-41 and 43-56 is/are rejected.
- 7) ☐ Claim(s) 27-31 and 42 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 21 June 2001 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) :                      | 4) <input type="checkbox"/> Interview Summary (PTO-413)                     |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)               | Paper No(s)/Mail Date. _____  |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date <u>6/21/01</u> .   | 6) <input type="checkbox"/> Other: _____                                    |

## **DETAILED ACTION**

1. This action is responsive to communications: the application and the IDS filed on 6/21/01.
2. Claims 1-56 are pending in the case. Claims 1, 20, 26, 46-48, 53-56 are independent claims.

### ***Drawings***

3. The drawings are objected to under 37 CFR 1.83(a) because figures 7-17 are too dark, and so fail to show the contents as described in the specification. Any structural detail that is essential for a proper understanding of the disclosed invention should be shown in the drawing. MPEP § 608.02(d). Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. The replacement sheet(s) should be labeled "Replacement Sheet" in the page header (as per 37 CFR 1.84(c)) so as not to obstruct any portion of the drawing figures. If the changes are not accepted by the

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examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

### ***Specification***

4. The specification is objected to because:
  - the referred number "31" within "the highlighting of the top two rows 31 in figure 8 discussed supra" (specification, page 13, lines 7-9) is not consistent with the two rows 28 as seen in figure 8
  - the referred number "29" within "In FIG. 12, the top row 29 of the Search drawer 24 ... applies to the highlighting of the top row 29 of the Search drawer 24 in FIG. 12" (specification, page 16, lines 5-9) is not consistent with figure 12 since the Search drawer does not has the top row 29, and the top row 29 is included in the Alert drawer, not the Search drawer

### ***Claim Objections***

5. Claim 37 is objected to because of the following informalities: the phrase "in accordance with the sort key" (lines 3-4) is redundant. Appropriate correction is required.

### ***Claim Rejections - 35 USC § 101***

6. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

7. Claims 1-25, 55 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter. The data display structure as in the claims 1-2, 20, 55 is not embodied in a computer readable medium, and thus, is merely a descriptive data without functionality. Also, the claimed drawers included in the data display structure, which are "*adapted to being opened or to being closed*", show that they are not actually the functional elements but instead are merely the display structure *intended to have the open function or the close function*. Therefore, the claimed data display structure is not functional, and thus is not statutory.

Dependent claims 2-19, 21-25 are rejected for fully incorporating the deficiencies of their base claims 1 and 20.

### ***Claim Rejections - 35 USC § 112***

8. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

9. Claim 27 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Regarding claim 27, it is confusing why there should be two tabs, tab  $T_i$  associated with each drawer  $D_i$  where  $i = 1, 2, \dots, N$  and tab  $T_k$  associated with drawer  $D_k$  where  $k = 1, 2, \dots, N$ , where it appears that the two tabs as claimed are the same.

### ***Double Patenting***

10. A rejection based on double patenting of the "same invention" type finds its support in the language of 35 U.S.C. 101 which states that "whoever invents or discovers any new and useful process ... may obtain a patent therefor ..." (Emphasis added). Thus, the term "same invention," in this context, means an invention drawn to identical subject matter. See *Miller v. Eagle Mfg. Co.*, 151 U.S. 186 (1894); *In re Ockert*, 245 F.2d 467, 114 USPQ 330 (CCPA 1957); and *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970).

A statutory type (35 U.S.C. 101) double patenting rejection can be overcome by canceling or amending the conflicting claims so they are no longer coextensive in scope. The filing of a terminal disclaimer cannot overcome a double patenting rejection based upon 35 U.S.C. 101.

11. Claims 3 and 28 are objected to under 37 CFR 1.75 as being a substantial duplicate of claims 4 and 29 since the feature that a row of data of the main drawer "is highlighted" means that the row of data of the main drawer is highlighted in black, which is a color, and thus, is not different from the fact that a row of data of the main drawer "is highlighted in color." When two claims in an application are duplicates or else are so close in content that they both cover the same thing, despite a slight difference in wording, it is proper after allowing one claim to object to the other as being a substantial duplicate of the allowed claim. See MPEP § 706.03(k).

12. Claims 7 and 32 are objected to under 37 CFR 1.75 as being a substantial duplicate of claims 8 and 33 since the feature of selection of a button causes the button to be highlighted means the button is highlighted in black, which is a color, and thus is not different from the feature of causing the button to be highlighted in color. When two claims in an application are duplicates or else are so close in content that they both cover the same thing, despite a slight difference in wording, it is proper after allowing

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one claim to object to the other as being a substantial duplicate of the allowed claim.

See MPEP § 706.03(k).

13. Claim 26 is objected to under 37 CFR 1.75 as being a substantial duplicate of claim 47. When two claims in an application are duplicates or else are so close in content that they both cover the same thing, despite a slight difference in wording, it is proper after allowing one claim to object to the other as being a substantial duplicate of the allowed claim. See MPEP § 706.03(k).

14. Claim 48 is objected to under 37 CFR 1.75 as being a substantial duplicate of claim 54. When two claims in an application are duplicates or else are so close in content that they both cover the same thing, despite a slight difference in wording, it is proper after allowing one claim to object to the other as being a substantial duplicate of the allowed claim. See MPEP § 706.03(k).

### ***Claim Rejections - 35 USC § 102***

15. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

16. Claims 1, 7-8, 13-15, 18, 26, 32-33, 38-41, 44, 46-47 are rejected under 35 U.S.C. 102(b) as being anticipated by Microsoft Corporation, copyright 1999, Microsoft Excel, referred as Excel, screenshots, pages 1-8.

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Regarding independent claim 26, Excel discloses:

- overlaying a main drawer  $D_0$  on a display screen (page 2: overlaying Book2 on a display screen)
- dynamically displaying, in spreadsheet format on  $D_0$ , a portion of a data feed (page 2: Book2 has a portion of a data feed)
- positioning  $N$  additional drawers  $D_1, D_2, \dots, D_N$ , in an overlay pattern  $\{D_1, D_2, \dots, D_N\}$  relative to  $D_0$  wherein  $N$  is at least 2, wherein each drawers  $D_i$  ( $i = 1, 2, \dots, N$ ) is adapted to being opened or to being closed, wherein the  $N$  additional drawers include a Search drawer and an Alerts drawer such that that the Alerts drawer includes  $M$  buttons  $B_1, B_2, \dots, B_M$  respectively identifying a subset  $S_1, S_2, \dots, S_M$  of the data feed, wherein  $M$  is at least 1, wherein selection of button  $B_m$  causes the Search drawer to dynamically display  $S_m$  in spreadsheet format, and wherein  $m$  is one of 1, 2,  $\dots$ ,  $M$  (**pages 3-6**: the two spreadsheets PriorArts and Abbreviation considered as the additional drawers being positioned in an overlay pattern where each file as each drawer is adapted to being opened or being closed; the PriorArts drawer includes the buttons Internet, Network, Document&Database, Multimedia respectively identifying the subsets of the data feed wherein  $M$  is at least 1, and wherein selection of button Internet, button Network,  $\dots$  causes the PriorArts drawer to dynamically display the subset data of Internet or Network in spreadsheet format, where  $m$  is one of 1, 2,  $\dots$ ,  $M$  as seen on pages 3, 5)



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Regarding claim 32, which is dependent on claim 26, Excel discloses selecting button  $B_m$  then highlighting  $B_m$  immediately following said selecting of  $B_m$  until the portion of  $S_M$  becomes initially viewable (**pages 3 and 5**: when selecting button Internet or button Network, button Internet or button Network is highlighted and the portion of Internet data or Network data is viewable).

Regarding claim 33, which is dependent on claim 26, Excel discloses selecting button  $B_m$  then highlighting in color  $B_m$  immediately following said selecting of  $B_m$  until the portion of  $S_M$  becomes initially viewable (**pages 3 and 5**: when selecting button Internet or button Network, button Internet or button Network is highlighted in white color and the portion of Internet data or Network data is viewable).

Regarding claim 38, which is dependent on claim 26, Excel discloses that the M buttons constitutes a portfolio of buttons that is user selectable from a menu that includes a plurality of portfolios of buttons, and further comprising selecting by the user the M buttons from the plurality of portfolios of buttons (**pages 3 and 5**: the buttons Internet, Network, Multimedia of the PriorArts excel are selectable from a menu that includes these buttons and thus, selecting the buttons from the portfolio of buttons can be made by users).

Regarding claim 39, which is dependent on claim 26, Excel discloses dynamically selecting the multisubset of the data feed to be either all of the data feed or less than all

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of the data feed (pages 3-4: using the vertical control bar as in page 4 to select a desired subset of the data feed to be less than all of the data feed).

Regarding claim 40, which is dependent on claim 26, Excel discloses that the portion of the data feed is all of the data feed (page 2).

Regarding claim 41, which is dependent on claim 26, Excel discloses that the portion of the data feed is a portfolio subset of the data feed (**pages 3-4**: the data of Internet is a portfolio subset of the data feed, which is the PriorArts file).

Regarding claim 44, which is dependent on claim 26, Excel discloses providing the data feed includes providing a stored data feed (**pages 3-6**: the data of Internet or Network provided as in pages 3-6 is the stored data).

Claims 1, 7-8, 13-15, 18 are for a data display structure of the method claims 26, 32-33, 38-41, 44 and are rejected under the same rationale.

Regarding independent claim 46, Excel discloses:

- overlaying a main drawer  $D_0$  on a display screen (page 2: overlaying Book2 on a display screen)
- dynamically displaying, in spreadsheet format on  $D_0$ , a portion of a data feed (page 2: Book2 has a portion of a data feed)

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- positioning N additional drawers  $D_1, D_2, \dots, D_N$ , in an overlay pattern  $\{D_1, D_2, \dots, D_N\}$  relative to  $D_0$  wherein N is at least 2, wherein each drawers  $D_i$  ( $i = 1, 2, \dots, N$ ) is adapted to being opened or to being closed, wherein the N additional drawers include a Search drawer and an Alerts drawer such that that the Alerts drawer includes M buttons  $B_1, B_2, \dots, B_M$  respectively identifying a subset  $S_1, S_2, \dots, S_M$  of the data feed, wherein M is at least 1 (**pages 3-6: the two spreadsheets PriorArts and Abbreviation considered as the additional drawers being positioned in an overlay pattern where each spreadsheet as each drawer is adapted to being opened or being closed; the PriorArts drawer includes the buttons Internet, Network, Document&Database, Multimedia respectively identifying the subsets of the data feed wherein M is at least 1)**)
- selecting a button  $B_m$  wherein m is one of 1, 2, ..., M (**pages 3-4, 5-6: selection of button Internet, button Network, ... causes the PriorArts drawer to dynamically display the subset data of Internet or Network in spreadsheet format, where m is one of 1, 2, ..., M as seen on pages 3, 5)**)
- dynamically displaying  $S_m$  in spreadsheet format on the Search drawer, wherein said dynamically displaying is triggered by the selecting of the button  $B_m$  (**pages 3-4, 5-6: by selecting button Internet, button Network, ... the PriorArts drawer, which is considered equivalent to the claimed Search drawer, dynamically displays the subset data of Internet or the subset data of Network in spreadsheet format, where m is one of 1, 2, ..., M as seen on pages 3, 5)**)

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Regarding independent claim 47, Excel discloses:

- overlaying a main drawer  $D_0$  on a display screen (page 2: Book2 on a display screen)
- dynamically displaying, in spreadsheet format on  $D_0$ , a portion of a data feed (page 2: Book2 has a portion of a data feed)
- positioning  $N$  additional drawers  $D_1, D_2, \dots, D_N$ , in an overlay pattern  $\{D_1, D_2, \dots, D_N\}$  relative to  $D_0$  wherein  $N$  is at least 2, wherein the  $N$  additional drawers include a Search drawer and an Alerts drawer such that that the Alerts drawer includes  $M$  buttons  $B_1, B_2, \dots, B_M$  respectively identifying a subset  $S_1, S_2, \dots, S_M$  of the data feed, wherein  $M$  is at least 1 (**pages 3-6**: the two spreadsheets PriorArts and Abbreviation considered as the additional drawers being positioned in an overlay pattern; the PriorArts drawer includes the buttons Internet, Network, Document&Database, Multimedia respectively identifying the subsets of the data feed wherein  $M$  is at least 1)
- opening and closing drawer  $D_i$  wherein  $i$  is one of 1, 2, ...,  $N$  (**pages 3-6**: the files PriorArts and Abbreviation as disclosed in spreadsheet format are considered as drawers adapted to being opened or being closed when clicking on the PriorArts button or Abbreviation button for opening and clicking on the X button on the up right corner of each drawer for closing)

***Claim Rejections - 35 USC § 103***

17. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

18. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

19. Claims 17, 19, 43, 45 are rejected under 35 U.S.C. 103(a) as being unpatentable over Excel as applied to claims 1 and 26 above and further in view of Polilli, Conferencing Software Available for Windows, InfoWorld, Feb 7, 1994, vol 16, iss 6, pg. 44, 1 pg, printed from ProQuest as pages 1-2.

Regarding claim 43, which is dependent on claim 26, Excel does not disclose providing the data feed includes providing a live data feed.

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Polilli discloses providing a live data feed (**page 2**: "... Data from a spreadsheet, an image, or another document could be dropped in, as could *live* video of other participants").

It would have been obvious to an ordinary skill in the art at the time of the invention was made to have combined Polilli into Excel since Polilli discloses having live video as data in the spreadsheet providing the advantage to incorporate into Excel to make a spreadsheet more interesting and attractive to users with live data instead of static data as usual.

Regarding claim 45, which is dependent on claim 44, Excel does not disclose that the stored data feed is a video data feed.

Polilli discloses providing a live video data feed (**page 2**: "... Data from a spreadsheet, an image, or another document could be dropped in, as could live *video* of other participants").

It would have been obvious to an ordinary skill in the art at the time of the invention was made to have combined Polilli into Excel since Polilli discloses having live video as data in the spreadsheet providing the advantage to incorporate into Excel to make a spreadsheet more interesting and attractive to users with live video data instead of text or graphics as usual.

Claims 17, 19 are for a data display structure included in the method claims 43, 45, and are rejected under the same rationale.

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20. Claims 20, 22-24, 48, 50-54 are rejected under 35 U.S.C. 103(a) as being unpatentable over Microsoft Corporation, copyright 1999, Microsoft Excel, referred as Excel, screenshots, pages 1-12 in view of Belzberg (US Pat No. 6,134,535, 10/17/00, filed 9/19/96) .

Regarding independent claim 48, Excel discloses:

- overlaying a main drawer  $D_0$  on a display screen (page 2: overlaying Book2 on a display screen)
- dynamically displaying, in spreadsheet format on  $D_0$ , a portion of a data feed (page 2: Book2 has a portion of a data feed)
- positioning  $N$  additional drawers  $D_1, D_2, \dots, D_N$ , in an overlay pattern  $\{D_1, D_2, \dots, D_N\}$  relative to  $D_0$  wherein  $N$  is at least 2, wherein each drawers  $D_i$  ( $i = 1, 2, \dots, N$ ) is adapted to being opened or to being closed, wherein the  $N$  additional drawers include a Search drawer and an Alerts drawer such that that the Alerts drawer includes  $M$  buttons  $B_1, B_2, \dots, B_M$  respectively identifying a subset  $S_1, S_2, \dots, S_M$  of the data feed, wherein  $M$  is at least 1, wherein selection of button  $B_m$  causes the Search drawer to dynamically display  $S_m$  in spreadsheet format, and wherein  $m$  is one of 1, 2, ...,  $M$  (**pages 3-6**: the two spreadsheets PriorArts and Abbreviation considered as the additional drawers being positioned in an overlay pattern where each file as each drawer is adapted to being opened or being closed; the PriorArts drawer includes the buttons Internet, Network, Document&Database, Multimedia respectively identifying the subsets of the data

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feed wherein M is at least 1, and wherein selection of button Internet or button Network, ... causes the PriorArts drawer to dynamically display the subset data of Internet or Network in spreadsheet format, where m is one of 1, 2, ..., M as seen on pages 3, 5)

Excel does not disclose that the data feed comprises stock bids and offers on a stock exchange, and the buttons  $B_1, B_2, \dots, B_M$  are identified with a stock that trades on the stock exchange.

Belzberg teaches:

- using spreadsheet technology to disclose the data of the stock exchange (col 1, lines 14-39, figure 3B)
- the data feed comprises stock bids and offers on a stock exchange (figures 2B, 3A)
- the Bid column is included in the spreadsheet (figure 3B).

It would have been obvious to one of ordinary skill in the art at the time of the invention was made to have combined Belzberg into Excel since Belzberg discloses stock bids and offers on a stock exchange and a spreadsheet includes the Bid column, which is the stock exchange data, providing the advantage to incorporate the stock bids and offers in a stock exchange as data in the spreadsheet of Excel as well as identifying M buttons  $B_1, B_2, \dots, B_M$  with a stock that trades on the stock exchange. In applying stock exchange data to Excel, each type of stock exchange data such as stock bids or offers would be stored in a subs spreadsheet Stock Bids or Offers represented by buttons Stock Bids and Offers included in spreadsheet Stock Exchange. These subs spreadsheets and



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spreadsheet are analogous to spreadsheet PriorArts with subspeadsheets Network and Internet represented by buttons Network and Internet as disclosed in Excel.

Regarding claim 50, which is dependent on claim 48, Excel does not disclose that the live data feed comprises stock data selected from the group consisting of stock halt data, stock delay data, stock resume data, stock bid/offer cancellation data, and combination thereof.

Belzberg discloses the data feed in the spreadsheet comprises stock bid data (figure 3B).

It would have been obvious to one of ordinary skill in the art at the time of the invention was made to have combined Belzberg into Excel since Belzberg teaches that the data included in the spreadsheet is the stock bid data thus motivating to incorporate the stock bid data into Excel to use Excel as an effective tool for trading where the traders can execute their orders in a matter of seconds on their computer before the price or other condition have changed.

Regarding claim 51, which is dependent on claim 48, Excel and Belzberg do not disclose that the spreadsheet format includes a Time column, an Offer column, a Bid Vol column, an Offer Vol column, and a Status column.

Belzberg discloses the spreadsheet format includes a Symbol column, a Bid column, a Bid Size column, etc.,, (figure 3B). Belzberg further discloses the Offer data, the Bid

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volume data (col 3, lines 15-33, 51-57), the Previous Trade and the Order Log (figure 2A).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention was made to have modified Belzberg to include the Time column, and the Status column since the Previous Trade and the Order Log data in Belzberg suggests that the time and the status of the trades be recorded and accordingly such time data and status data be disclosed in the suitable columns of the spreadsheet. Further, the Offer data and the Bid volume data in Belzberg suggests to include the Offer column and the Bid Vol column for containing the Offer data and for the Bid volume data in the spreadsheet for completely disclosing the data relating to the stock exchange.

Regarding claim 52, which is dependent on claim 50, Excel and Belzberg do not disclose that the spreadsheet format further includes at least one of a Halt Reason column and a Corp Action column.

However, Belzberg does teach that the spreadsheet comprises a plurality of columns for containing data related to the stock exchange (figure 3A, col 3, lines 51-67).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention was made to have modified Belzberg to include the Halt Reason column and the Corp Action column to disclose the halt data and the action data since the Quit function (figure 2C) and the Order Log (figure 2A) suggests containing the halt data and the action data in Belzberg, and thus suggests including the proper columns for disclosing such data in the spreadsheet.

Regarding independent claim 53, Excel discloses:

- overlaying a main drawer  $D_0$  on a display screen (page 2: overlaying Book2 on a display screen)
- dynamically displaying, in spreadsheet format on  $D_0$ , a portion of a data feed (page 2: Book2 has a portion of a data feed)
- positioning  $N$  additional drawers  $D_1, D_2, \dots, D_N$ , in an overlay pattern  $\{D_1, D_2, \dots, D_N\}$  relative to  $D_0$  wherein  $N$  is at least 2, wherein each drawers  $D_i$  ( $i = 1, 2, \dots, N$ ) is adapted to being opened or to being closed, wherein the  $N$  additional drawers include a Search drawer and an Alerts drawer such that that the Alerts drawer includes  $M$  buttons  $B_1, B_2, \dots, B_M$  respectively identifying a subset  $S_1, S_2, \dots, S_M$  of the data feed, wherein  $M$  is at least 1 (**pages 3-6**: the two spreadsheets PriorArts and Abbreviation considered as the additional drawers being positioned in an overlay pattern where each file as each drawer is adapted to being opened or being closed; the PriorArts drawer includes the buttons Internet, Network, Document&Database, Multimedia respectively identifying the subsets of the data feed wherein  $M$  is at least 1)
- selecting a button  $B_m$  wherein  $m$  is one of 1, 2, ...,  $M$  (**pages 3-4, 5-6**: selection of button Internet, button Network, ... causes the PriorArts drawer to dynamically display the subset data of Internet or Network in spreadsheet format, where  $m$  is one of 1, 2, ...,  $M$  as seen on pages 3, 5)
- dynamically displaying  $S_m$  in spreadsheet format on the Search drawer, wherein said dynamically displaying is triggered by the selecting of the button  $B_m$  (**pages**

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**3-4, 5-6:** by selecting button Internet, button Network, ... the PriorArts drawer, which is considered equivalent to the claimed Search drawer, dynamically displays the subset data of Internet or the subset data of Network in spreadsheet format, where  $m$  is one of 1, 2, ...,  $M$  as seen on pages 3, 5)

Excel does not disclose that the data feed comprises stock bids and offers on a stock exchange, and the buttons  $B_1, B_2, \dots, B_M$  are identified with a stock that trades on the stock exchange.

Belzberg discloses that the data feed comprises stock bids and offers on a stock exchange (figures 2B, 3A). Belzberg also discloses the Bid column included in the spreadsheet (figure 3B).

It would have been obvious to one of ordinary skill in the art at the time of the invention was made to have combined Belzberg into Excel since Belzberg discloses stock bids and offers on a stock exchange and a spreadsheet includes the Bid column, which is the stock exchange data, providing the advantage to incorporate the stock bids and offers in a stock exchange as data in the spreadsheet of Excel. In applying stock exchange data to Excel, each type of stock exchange data such as stock bids or offers would be stored in a subs spreadsheet Stock Bids or Offers represented by buttons Stock Bids and Offers included in spreadsheet Stock Exchange. These subs spreadsheets and spreadsheet are analogous to spreadsheet PriorArts with subspeadsheets Network and Internet represented by buttons Network and Internet as disclosed in Excel.

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Regarding independent claim 54, Excel discloses:

- overlaying a main drawer  $D_0$  on a display screen (page 2: overlaying Book2 on a display screen)
- dynamically displaying, in spreadsheet format on  $D_0$ , a portion of a data feed (page 2: Book2 has a portion of a data feed)
- positioning  $N$  additional drawers  $D_1, D_2, \dots, D_N$ , in an overlay pattern  $\{D_1, D_2, \dots, D_N\}$  relative to  $D_0$  wherein  $N$  is at least 2, wherein the  $N$  additional drawers include a Search drawer and an Alerts drawer such that that the Alerts drawer includes  $M$  buttons  $B_1, B_2, \dots, B_M$  respectively identifying a subset  $S_1, S_2, \dots, S_M$  of the data feed, wherein  $M$  is at least 1 (**pages 3-6**: the two spreadsheets PriorArts and Abbreviation considered as the additional drawers being positioned in an overlay pattern; the PriorArts drawer includes the buttons Internet, Network, Document&Database, Multimedia respectively identifying the subsets of the data feed wherein  $M$  is at least 1)
- opening or closing drawer  $D_i$  wherein  $i$  is one of 1, 2, ...,  $N$  (**pages 3-6**: the files PriorArts and Abbreviation as disclosed in spreadsheet format are considered as drawers adapted to being opened or being closed when clicking on the PriorArts button or Abbreviation button for opening and clicking on the X button on the up right corner of each drawer for closing)

Excel does not disclose that the data feed comprises stock bids and offers on a stock exchange, and the buttons  $B_1, B_2, \dots, B_M$  are identified with a stock that trades on the stock exchange.

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Belzberg teaches:

- using spreadsheet technology to disclose the data of the stock exchange (col 1, lines 14-39, figure 3B)
- the data feed comprises stock bids and offers on a stock exchange (figures 2B, 3A)
- the Bid column included in the spreadsheet (figure 3B).

It would have been obvious to one of ordinary skill in the art at the time of the invention was made to have combined Belzberg into Excel since Belzberg discloses stock bids and offers on a stock exchange and a spreadsheet includes the Bid column, which is the stock exchange data, providing the advantage to incorporate the stock bids and offers in a stock exchange as data in the spreadsheet of Excel as well as identifying M buttons  $B_1, B_2, \dots, B_M$  with a stock that trades on the stock exchange. In applying stock exchange data to Excel, each type of stock exchange data such as stock bids or offers would be stored in a subs spreadsheet Stock Bids or Offers represented by buttons Stock Bids and Offers included in spreadsheet Stock Exchange. These subs spreadsheets and spreadsheet are analogous to spreadsheet PriorArts with subspeadsheets Network and Internet represented by buttons Network and Internet as disclosed in Excel.

Claims 20, 22-24 are for a data display structure included in the method claims 48, 50-52, and are rejected under the same rationale.

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21. Claims 21 and 49 are rejected under 35 U.S.C. 103(a) as being unpatentable over Excel in view of Belzberg as applied to claim 48 above, and further in view of Business Editors & High Tech Writers, Belzberg Technologies Inc. Awarded U.S. Patent for Spreadsheet Trading Technology, Business Wire, Oct 20, 2000, page 1, printed from ProQuest as pages 1-2.

Regarding claim 49, which is dependent on claim 48, Excel does not disclose that the stock exchange is the New York Stock Exchange.

Belzberg discloses that the stock exchange is the Toronto Stock Exchange (page 3, lines 5-10).

Business Editors & High Tech Writers disclose that the Belzberg company has offices located in New York, Chicago, and Toronto (page 2).

It would have been obvious to one of ordinary skill in the art at the time of the invention was made to have combined Business Editors & High Tech Writers into Belzberg and Excel for obtaining the New York Stock Exchange as the stock exchange data since the fact that the Belzberg company has offices in New York, Chicago, and Toronto motivates to include the New York Stock Exchange as the stock exchange data in addition to the Toronto Stock Exchange disclosed in Belzberg.

Claim 21 is a data display structure of method claim 49, and is rejected under the same rationale.

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22. Claims 9-12, 16, 34-37 are rejected under 35 U.S.C. 103(a) as being unpatentable over Excel as applied to claims 1 and 26 above, and further in view of Khan et al. (US Pat No. 6,157,934, 12/5/00, filed 10/15/96).

Regarding claim 34, which is dependent on claim 26, Excel discloses sorting the main drawer in accordance with a sort key (pages 2 and 7: sorting data in Book2 as in page 2 in descending order). Excel does not disclose sorting the Search drawer in accordance with the sort key, wherein the sorting of the Search drawer is triggered by the sorting of the main drawer.

Khan discloses linking data between the main spreadsheet and the client spreadsheets where data entered in a cell of the client spreadsheet is transferred to the spreadsheet in the server (col 2, lines 36-47, figure 1).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention was made to have combined Khan into Excel for sorting a spreadsheet where sorting said spreadsheet is triggered by the sorting of the main spreadsheet linked to said spreadsheet for the following reason. The fact that the data entered in the client spreadsheets is also entered in the main spreadsheet in accordance to the data linking among the spreadsheets in Khan suggests that sorting the main spreadsheet will affect sorting the client spreadsheets. Similarly, since the Search drawer in the invention is equivalent to a form of a client spreadsheet, and the main drawer is equivalent to a form of a server spreadsheet, sorting the Search drawer by a sort key is affected by sorting the main drawer. In other words, sorting the Search drawer by a sort key is triggered by



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sorting the main drawer. The combination of Khan into Excel would save time in controlling the changes of data in different spreadsheets linking together when a change is made on the main spreadsheet, a change would be automatically applied the linked spreadsheets.

Regarding claim 35, which is dependent on claim 26, Excel discloses sorting the main drawer in accordance with a sort key (pages 2 and 7: sorting data in Book2 as in page 2 in descending order). Excel does not disclose sorting in accordance with the sort key each additional drawer that is sortable in accordance with the sort key, where the sorting of each additional drawer is triggered by the sorting of the main drawer.

Khan discloses linking data between the main spreadsheet and the client spreadsheets where data entered in a cell of the client spreadsheet is transferred to the spreadsheet in the server (col 2, lines 36-47, figure 1).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention was made to have combined Khan into Excel for sorting each additional spreadsheet with a sort key where sorting said additional spreadsheet is triggered by sorting of the main spreadsheet linked to said additional spreadsheet for the following reason. The fact that the data entered in the client spreadsheets is also entered in the main spreadsheet due to the data linking among the spreadsheets in Khan suggests that sorting the main spreadsheet will affect sorting the client spreadsheets due to data linking. Therefore, since each of the additional drawer in the invention is equivalent to a form of a client spreadsheet, and the main drawer is equivalent to a form of a server

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spreadsheet, sorting each additional drawer by a sort key is affected by sorting the main drawer. In other words, sorting additional drawer by a sort key is triggered by sorting the main drawer. The combination of Khan into Excel would save time in controlling the changes of data in different spreadsheets linking together when a change is made on the main spreadsheet, a change would be automatically applied to the linked spreadsheets.

Regarding claim 36, which is dependent on claim 26, Excel discloses sorting the Search drawer in accordance with a sort key (pages 3 and 8: sorting the Abbreviation as in page 3 in descending order).

Excel does not disclose sorting the main drawer is accordance with the sort key, wherein the sorting of the main drawer is triggered by the sorting of the Search drawer. Khan discloses linking data between the main spreadsheet and the client spreadsheets where data entered in a cell of the client spreadsheet is transferred to the spreadsheet in the server (col 2, lines 36-47, figure 1). Khan further discloses the performance of some functions either in the local spreadsheet or the main spreadsheet (col 4, lines 25-34).

It would have been obvious to one of ordinary skill in the art at the time of the invention was made to have combined Khan into Excel for sorting the main drawer wherein sorting of the main drawer is triggered by sorting of the Search drawer. The fact that due to the data linking among the spreadsheets, changes can be made to the local spreadsheet or the main spreadsheet in Khan suggests that sorting one spreadsheet

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will affect sorting the linked spreadsheets. Therefore, since the Search drawer in the invention is equivalent to a form of a client spreadsheet, and the main drawer is equivalent to a form of a server spreadsheet, sorting the main drawer by a sort key is affected by sorting the Search drawer. In other words, sorting the main drawer by a sort key is triggered by sorting the linked drawers. The combination of Khan into Excel would save time in controlling the changes of data in different spreadsheets linking together when a change is made on one spreadsheet, a change would be automatically applied the linked spreadsheets and affect on linked spreadsheets.

Regarding claim 37, which is dependent on claim 26, Excel discloses sorting a first drawer of the N additional drawer in accordance with a sort key (page 8: sorting the Abbreviation spreadsheet in descending order).

Excel does not disclose sorting in accordance with the sort key each remaining drawer of the N additional drawers that is sortable, wherein the sorting of each such remaining drawer is triggered by the sorting of the first drawer.

Khan discloses linking data between the main spreadsheet and the client spreadsheets where data entered in a cell of the client spreadsheet is transferred to the spreadsheet in the server (col 2, lines 36-47, figure 1). Khan further discloses the performance of some functions either in the local spreadsheet or the main spreadsheet (col 4, lines 25-34).

It would have been obvious to one of ordinary skill in the art at the time of the invention was made to have combined Khan into Excel for sorting each remaining drawer of the N

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additional drawers wherein sorting of each such remaining drawer is triggered by sorting of the first drawer.

The fact that due to the data linking among the spreadsheets, changes can be made to the local spreadsheet or the main spreadsheet in Khan suggests that sorting one spreadsheet will affect sorting the linked spreadsheets. Therefore, since the Search drawer in the invention is equivalent to a form of a client spreadsheet, and the main drawer is equivalent to a form of a server spreadsheet, sorting a drawer by a sort key is affected by sorting the other linked drawers. The combination of Khan into Excel would save time in controlling the changes of data in different spreadsheets linking together when a change is made on one spreadsheet, a change would be automatically applied to the linked spreadsheets and affect on linked spreadsheets.

Claims 9-12 are for a data display structure of method claims 34-37, and are rejected under the same rationale.

Regarding claim 16, which is dependent on claim 1, Excel does not disclose a first drawer of the N additional drawer is adapted to display content in accordance with a user command that is directed to the main drawer or to a second drawer of the N additional drawers.

Khan discloses linking data between the main spreadsheet and the client spreadsheets where data entered in a cell of the client spreadsheet is transferred to the spreadsheet in the server (col 2, lines 36-47, figure 1).

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It would have been obvious to one of ordinary skill in the art at the time of the invention was made to have combined Khan into Excel since Khan discloses the linking of cells between the two spreadsheets where entering data in a cell of the client spreadsheet would cause the data to be transferred and appear in the main spreadsheet. In other words, Khan discloses displaying the content on a second spreadsheet based on the user command directed on the first spreadsheet linked to the second spreadsheet.

Since a drawer in the invention is merely a form of a spreadsheet as in Excel and Khan, displaying the content on a second spreadsheet based on the user command directed on the first spreadsheet is equivalent to displaying the content on a second drawer based on the user command executed on the first drawer. The combination of Khan into Excel would enhance the spreadsheet capability that allows data in various spreadsheets is linked together for quickly collecting as well as distributing data in a network system.

23. Claims 55-56 are rejected under 35 U.S.C. 103(a) as being unpatentable over Microsoft Corporation, copyright 1999, Microsoft Excel, referred as Excel, screenshots, pages 1-6 in view of Khan et al. (US Pat No. 6,157,934, 12/5/00, filed 10/15/96).

Regarding independent claim 56, Excel discloses:

- overlaying a main drawer  $D_0$  on a display screen (page 2)
- dynamically displaying, in spreadsheet format on  $D_0$ , a portion of a data feed (page 2)

- positioning N additional drawers  $D_1, D_2, \dots, D_N$ , in an overlay pattern  $\{D_1, D_2, \dots, D_N\}$  relative to  $D_0$  wherein N is at least 2, wherein the N additional drawers include a Search drawer and an Alerts drawer such that that the Alerts drawer includes M buttons  $B_1, B_2, \dots, B_M$  respectively identifying a subset  $S_1, S_2, \dots, S_M$  of the data feed, wherein M is at least 1 (**pages 3-6**: the two spreadsheets PriorArts and Abbreviation considered as the additional drawers being positioned in an overlay pattern; the PriorArts drawer includes the buttons Internet, Network, Document&Database, Multimedia respectively identifying the subsets of the data feed wherein M is at least 1)

Excel does not disclose:

- executing a user command that is directed to a first drawer of  $D_0, D_2, \dots, D_N$ ;
- displaying content on a second drawer of  $D_0, D_2, \dots, D_N$  based on the user command

Khan discloses the two spreadsheets that links to each other so that the data entered in a cell of the client spreadsheet is transferred to the spreadsheet in the server (col 2, lines 36-47).

It would have been obvious to one of ordinary skill in the art at the time of the invention was made to have combined Khan into Excel since Khan discloses the linking of cells between the two spreadsheets where entering data in a cell of the client spreadsheet would cause the data to be transferred and appear in the main spreadsheet. In other words, Khan discloses displaying the content on a second spreadsheet based on the user command directed on the first spreadsheet, which is the command for entering

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data to the first spreadsheet. Since a drawer in the invention is merely a form of a spreadsheet as in Excel and Khan, displaying the content on a second spreadsheet based on the user command directed on the first spreadsheet is equivalent to displaying the content on a second drawer based on the user command executed on the first drawer. The combination of Khan into Excel would enhance the spreadsheet capability that allows data in various spreadsheets is linked together for quickly collecting as well as distributing data in a network system.

Claim 55 is for a data display structure of method claim 56, and is rejected under the same rationale.

#### ***Allowable Subject Matter***

24. Claims 27-31, 42 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

#### ***Conclusion***

25. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Gibb et al. (US Pat No. 6,225,996 B1, 5/1/01, filed 2/20/98).

Sorge et al. (US Pat No. 6,613,998 B1, 9/2/03, filed 6/15/99).

Jackson. (US Pat No. 5,894,311, 4/13/99, filed 12/6/95).

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Maddalozzo, Jr. et al. (US Pat No. 6,445,400 B1, 9/3/02, filed 9/23/99).

Wilks et al. (US Pat No. 6,246,407 B1, 6/12/01, filed 6/16/97).

Igra et al. (US Pat No. 6,701,485 B1, 3/2/04, filed 6/15/99).

Faustini (US Pat No. 6,557,164 B1, 4/29/03, filed 1/13/99).

Lemmons et al. (US Pat No. 6,266,814, 7/24/01, filed 11/9/98).

Khan (US Pat App Pub No. 2002/0032611 A1, 3/14/02, filed 3/5/01, priority 3/6/00).

Jim Boyce et al., Using Microsoft Office 97, Que Corporation 1997, pages 252-256.

Brett, New Electronic Spreadsheet Has Been Getting Good Reviews, Toronto Star, Oct 11, 1987, pg. F.7.

Business Editors, Standard & Poor's Selects Partes' EDGAR Data Service to Provide Real-Time Fillings for Standard & Poor's Market Insight, Business Wire, Jun 9, 1999, pg. 1.

26. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Cong-Lac Huynh whose telephone number is 571-272-4125. The examiner can normally be reached on Mon-Fri (8:30-6:00).


If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Stephen Hong can be reached on 571-272-4124. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.



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Clh  
11/10/04

  
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